



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

April 10, 2000

Lon Thomas
Star Stone Quarries, Inc.
4040 South 300 West
Salt Lake City, Utah 84107

Re: Review of Notice of Intention to Commence Large Mining Operations, American Stone, Inc., Peoa Blonde Quarry, M/043/012, Summit County, Utah

Dear Mr. Thomas:

The Division has completed a review of your response to the Division's December 16, 1999 review of your Notice of Intention to Commence Large Mining Operations (NOI) for the Peoa Quarry, located in Summit County, Utah. This material was received by the Division on February 11, 2000. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion.

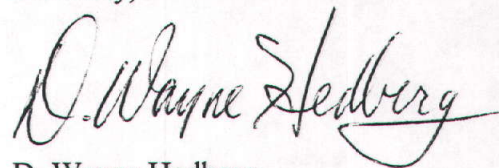
Please, address only the remaining technical review comments in your response and avoid revising other sections of the permit application to the extent possible. Continued changes and additions to proposed mining and reclamation plans will only further delay our final approval of the permit application. We are very anxious to complete the permitting process for this operation and cannot do so if the proposed plans keep changing following each subsequent review of the application. If this pattern continues, it may be construed that an intentional delay is occurring which may force us to reinstate the suspended enforcement action on this site.

The Division will suspend further review of the Peoa Quarry permit application until your response to this letter is received. If possible, please provide a response to this review no later than May 1, 2000. If you have any questions in this regard please contact me, Lynn Kunzler, Tom Munson or Doug Jensen of the Minerals Staff. If you wish to arrange a meeting to sit down

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and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg". The signature is written in dark ink and is positioned above the printed name and title.

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment: Review
cc: Lesley Burns, Summit County
Mary Ann Wright, DOGM
M43-12 rvw 3-11-00.wpd

REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

American Stone, Inc.
Peoa Quarry
M/043/012
April 10, 2000

GENERAL COMMENT:

Comments in *italic print* in this review are new and need to be addressed. Comments in standard print are from the December 16, 1999 review. These comments were either not addressed, or were inadequately addressed with your February 11, 2000 submittal. The Reviewers felt that these comments contained background information that would assist you in responding to this review and have included them for this purpose.

Please, address only these comments with your response. Revising other sections will only delay the approval process. This may be considered by the Division as not actively pursuing the final permit. Results of this may include a continuation of the previous enforcement action and an Order to cease operations until the permit is completed or an Order for the immediate reclamation of the site.

R647-4-105 - Maps, Drawings & Photographs

105.1 Topographic base map, boundaries, pre-act disturbance

Map 5 (final reclamation) does not show any reclamation treatments for an area of approximately 2.5 acres. This area is shown on the Variance Map (Map 7) for a commercial storage area. Please refer to comments under R647-4-112 regarding this variance. (LK)

New map 5.1 shows reclamation treatments for only 12.8 acres of the 25.7 total acres of disturbance. The Division has approved variances from reclamation for 3.5 acres (1.0 acre of access road and 2.5 acres of highwall). This leaves 22.2 acres that will require reclamation at this time. Please revise map 5.1 to show the reclamation treatments for the total 22.2 acres that will require reclamation. (LK)

R647-4-106 - Operation Plan

106.6 Plan for protecting & redepositing soils

The application does not identify how topsoil stockpiles will be protected during operations. At a minimum, they need to be revegetated and marked with signs that identify them as topsoil stockpiles and that they are not to be disturbed. (LK)

This comment was not addressed in the latest submittal. Please describe how topsoil stockpiles will be protected from further impact during operations. This description needs to include those species that will be used to seed the soil stockpiles. (LK)

106.7 Existing vegetation - species and amount

The response contained a brief description of the vegetation sampling. Apparently basal area was measured and provided rather than ground cover (canopy cover). No correlation between basal cover and ground cover was provided. As stated in the previous review, 19.5% vegetation cover is not accurate (expected range between 45% and 60% or higher). The Species list is acceptable. A new vegetation survey will need to be conducted next June to establish the revegetation success standard for this project. (LK)

A New vegetation survey will be conducted in June, 2000. The Division reserves further comment on this section after review of the new survey. (LK)

R647-4-107 - Operation Practices

107.2 Drainages to minimize damage

The operator states that he will put a french drain in each of the two drainages. In order that there is no confusion regarding where the french drains are to be placed, please show the highlighted reach of the drainage on a map or plate. The Division also requires that clean rock (+6-inch) with no fines be used for construction of the french drains. Division personnel must perform an inspection of the material to be placed in the french drain and the in-place drain, prior to expansion of the dump or pad. Please notify the Division at least one week prior to placement of the french drain rock material so we can schedule this inspection. (TM)

107.6 Concurrent reclamation

The area shown on Map 4 as concurrent reclamation does not meet reclamation success standards (as observed during the Division's recent inspections). Until reclamation success is achieved, this area will still be considered part of the affected and bonded mining operations disturbed area. (NOTE: vegetation success is evaluated after a minimum of three growing seasons. If continued impacts to this area (i.e. driving over it) continue to occur, it is unlikely success will be achieved without re-applying reclamation treatments of ripping and seeding. It is suggested that this area be fenced off (or otherwise isolated) and signed as a reclamation area to protect it from future impacts. (LK)

The applicant has requested bond release on 10.5 acres (this includes 10 acres of proposed commercial storage and 0.5 acres of road). These areas are still being used for mining related purposes. Summit County has not approved the long-term commercial storage proposal. The requested bond release is not approved. Furthermore, full reclamation of these areas is still required and must be included in the reclamation surety. (LK)

R647-4-109 - Impact Assessment

109.5 Actions to mitigate any impacts

The application indicates that fines salvaged from the operation and a topsoil borrow area will be used to mitigate the loss of soil resources. The Division's last review requested that a soil sample be taken from the proposed borrow area to show that the soil materials would be suitable for reclamation. To date, the Division has not received the analysis for the proposed borrow materials. The application states that soil resources will be spread at an approximate depth of 2 inches. Please refer to R647-4-110.5.11 for additional discussion. (LK)

The requested soil sample sent to USU soils lab on 1/21/00. The Division reserves further comment on this issue until the results of the soil analysis are reviewed. (LK)

R647-4-110 - Reclamation Plan

110.1 Current & post mining land use

The application identifies grazing and wildlife habitat as the current and post mining land use. In addition, the post mining land use identifies building a residence and development of a commercial storage area. If housing and commercial storage are implemented before reclamation success of the entire site is achieved, these land uses will need to be approved by Summit County. A copy of the appropriate County permits would need to be submitted to the Division. Since this has not yet been provided, the Division is assuming full reclamation of the entire mine site (with the exception of a 12-foot wide road used to access the property = @ one acre of disturbance). (LK)

The latest submittal states that "if these areas are not permitted with Summit County or granted a variance from reclamation by DOGM, they will be reclaimed in accordance with the same standards as are used on the rest of the property". Since the alternative post mining land uses have not yet been approved, the Division will expect full reclamation of the site. (LK)

110.3 Description of facilities to be left (post mining use)

With the exception of a 12-foot wide access road (as shown on Map 7), the application does not provide justification for leaving the two trailers (currently approved as temporary housing structures for employees by the County), the scale house and office building, or a commercial storage area. As discussed under Section R647-4-110.1, the Division will require full reclamation of these facilities unless they are approved and permitted for post mining land use by Summit County. (LK)

The application states that all facilities will be removed with the exception of the 12-foot wide access road unless the retention of the facilities are approved by Summit County. Since Summit County has not approved the retention of the facilities at this time, the Division will require complete reclamation of the site (with the exception of the 12-foot wide access road). Should approval be obtained at a later date, the plan can be amended or revised by making appropriate application. (LK)

110.5 Revegetation planting program

Please correct the seeding rate for Wyoming sagebrush to 0.1 pounds per acre. The 1.0 pounds per acre on the seed mix is excessive and would hinder establishment of a vegetative community conducive to the post mining land use.

R647-4-111 - Reclamation Practices

111.11 Structures & equipment buried or removed

As discussed under Section R647-4-110.1, the Division will require full reclamation of all the surface facilities and affected areas (except the access road) unless they are approved and permitted for an alternate post mining land use by Summit County. (LK)

R647-4-112 - Variance

The application contains requests for several variances.

1. A variance was requested from Rule R647-4-111.8, Reclamation of all Roads. Map 7 shows one road to remain for post mining access to the operator's private property. There are no other roads in the adjacent areas. The Division concurs that a 12-foot wide road for accessing the property is appropriate. This variance is approved. (LK)

The operator has requested the width of this road be increased to 20 feet to support the proposed post mining land use, which has not been approved by Summit County. Since the County has not approved the post mining land use, there is not justification to approve the wider road. The 20-foot wide road is denied. Therefore the Division's original approval of a variance to leave a 12-foot wide road stands. (LK)

2. A variance was requested from Rule R647-4-111.8, Reclamation of pads. Map 7 identifies an area currently used for storing pallets and rock to remain for a commercial storage area. No justification was provided for this variance. Before the Division can approve this requested variance, the operator will need to provide a copy of the approved special use permit from Summit County for the proposed commercial use. Until this is received, the Division will require reclamation of this area. This requested variance is denied. (LK)

This variance request was modified to include 10.5 acres for commercial and private storage. The operator provided a copy of an application to Summit County for a Special Use Permit to use this area for commercial storage. The County has not approved this permit. Therefore, the Division will require reclamation of this area. The requested variance is denied. (LK)

3. A variance was requested from Rule R647-4-111.11, Removal of structures. The operator wants to leave a small camp which includes the two trailers. At the present time, Summit

County has approved the two trailers under a Temporary Use Permit for employee housing. The operator has also requested that the scale and office building remain for use in conjunction with the proposed commercial storage area (variance #2). These uses must be approved by Summit County before the Division can consider allowing these structures to remain for the proposed post mining land use. To date, the County has not approved the use of these structures for the post mining land use. This requested variance is denied. (LK)

4. *The Operator requested variances from Rules R647-4-111.12, Topsoil Redistribution, and 111.13, Revegetation, for 2.5 acres of highwall area that will remain. The highwall will have an overall slope of 45 degrees or less and will have 10-foot wide catch benches. The variance request states that it is not safe or practical to apply topsoil or revegetate these narrow benches. The Division concurs with the analysis and hereby approves the requested variances to not apply topsoil or revegetate the 2.5 acres of highwall area. (LK)*
5. *The NOI identifies the final use of the pit bottom (approximately 1 acre in size) as a pond for post mining land use. No variance was requested for this structure (Rule R647-4-111.10 requires small pits to be reclaimed). If this pond is to be a part of the post-mine land use, a variance to the referenced rule will need to be requested and approved. This will require the attached surety calculations to be revised to include an armored spillway and the construction of an additional drainage to connect this pond to the closest existing drainage in order to comply with Rule R647-4-111.9. The spillway and associated drainage channel will need to be shown on a map. Please note, the Utah Division of Water Rights may also require specific permitting for this structure. Please provide documentation from them that the structure is approved by their Office or that it is exempt from their jurisdiction. (TM)*

R647-4-113 - Surety

The following notes explain changes made to the reclamation cost estimate submitted by American Stone. The unit costs have changed on the estimate due to the recent updating of costs in the Means Rental Rate Blue Book. (DJ)

Our estimate is based upon reclamation of the entire site (25.7 acres), less the one acre for roads to be used after mining has ceased and the 2.5 acre highwall variance. The present county permit for this area calls for the reclamation of the entire site with no allowances for future commercial ventures, presently only the ranch road (one acre) has been removed from the reclamation liability by DOGM. (DJ)

(Line 42) Two drainages will need to be restored on closure, each would need to be approximately 350' long. If the construction of a pond is still contemplated, additional calculations will be necessary in this area to cover the costs.

RECLAMATION SURETY ESTIMATE

last revisi 04/03

American Stone

Peoa Blonde

M/043/012

Summit

Prepared by Utah State Division of Oil, Gas & Mining

Surety was calculated on the basis of 22.2 acres, one acre was allowed for an internal road to remain as access to home located below site and 2.5 acres allowed for highwalls. Topsoil placement was calculated at 6" to be placed over the entire site.

Because no variance was allowed for any storage areas within the site, all building are to be removed. Internal road width to remain at a 12' width.

A \$5000.00 bond is being held by Summit County for the removal of trailers from site. Because of this fact the trailer removal is not a part of this bond.

Highwall variance granted if highwalls are maintained at a 45° slope.

Note: actual unit costs may vary according to site conditions

-Amount of disturbed area which will receive reclamation treatments = 22.2 acres

-Estimated total disturbed area for this mine = 25.7 acres

| Activity | Quantity | Units | \$/unit | \$ | Note |
|---|----------|----------|---------|-----------------|------|
| Safety gates, signs, etc. (mtls & installation) | 0 | sum | 200 | 0 | (1) |
| Demolition of buildings & facilities | 50 | CF | 0.25 | 13 | (2) |
| Debris & equipment removal - trucking | 5 | trips | 48 | 240 | (3) |
| Debris & equipment removal - dump fees | 10 | ton | 55 | 550 | (4) |
| Debris & equipment removal - loading trucks w/FE loader | 6 | hours | 176 | 1,056 | (5) |
| Demolition & debris removal - general labor | 6 | hours | 15 | 90 | (6) |
| Regrading facilities areas (1 ft depth) | 4.0 | acre | 470 | 1,880 | (7) |
| Regrading waste dump slopes (1.7 ac X 3 ft deep) | 8,300 | CY | 0.47 | 3,901 | (8) |
| Ripping waste dump tops | 5.5 | acre | 220 | 1,210 | (9) |
| Ripping stockpile & compacted areas | 1.0 | acre | 220 | 220 | (9) |
| Ripping Site Prior to Seeding | 6.0 | acre | 220 | 2,200 | (9) |
| Ripping pit floors prior to soil placement | 4.0 | acre | 220 | 880 | (9) |
| Creating safety berms or barriers around highwalls | 850 | LF | 0.15 | 128 | (10) |
| Regrading access roads - dozer | 1.0 | acre | 470 | 470 | (7) |
| Surface drainage restoration or construction | 700 | LF | 0.15 | 105 | (10) |
| Armor Drainages | 20 | hours | 15 | 300 | (12) |
| Topsoil replacement - Dozer | 13,600 | CY | 0.55 | 7,480 | (13) |
| Topsoil replacement - FE loader | 6800 | CY | 1.15 | 7,820 | (14) |
| Soil Amendment/ Composted Manure (5 ton/acre) | 16.9 | acre | 100 | 1,690 | |
| Soil Amendment/Composted manure (10 ton/acre) | 5.3 | acre | 200 | 1,060 | (00) |
| Broadcast seeding | 22.2 | acre | 170 | 3,774 | (00) |
| General site cleanup & trash removal | 12.0 | acre | 50 | 600 | (00) |
| Equipment mobilization | 2 | equip | 900 | 1,800 | (00) |
| Reclamation Supervision | 7 | days | 372 | 2,604 | (15) |
| | | Subtotal | | 40,070 | |
| 10% Contingency | | | | 4,007 | |
| | | Subtotal | | \$44,077 | |
| Escalate for 5 years at 3.27% per yr | | | | 7,694 | |
| | | Total | | \$51,771 | |
| | | | | \$51,800 | |
| Rounded surety amount in yr 2004-\$ | | | | \$51,800 | |
| Average cost per disturbed acre = | | | | \$2,016 | |

- | | |
|------|--|
| (1) | DOGM lump sum assumed |
| (2) | Means Heavy Construction Cost Data 1998, 020-604-0100, mixture of bldg. types, average, excluding dump fees |
| (3) | Means 1998, 020-620-5100, \$.48/mile for >8CY truck; assumed 100 miles round trip |
| (4) | Means 1998, 020-612-0100, dump charges, typical urban city, tipping fees only, bldg construction mtl's |
| (5) | Rental Rate Blue Book 4/98, Cat 988B, 7CY, & Means 1998, Crew B-10U, loading trucks only |
| (6) | DOGM assumed wage for unskilled general labor |
| (7) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, 1 ft depth |
| (8) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 100 ft push |
| (9) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, multi shank rippers, speed 1.0 mph |
| (9) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, multi shank rippers, speed 1.0 mph |
| (9) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, multi shank rippers, speed 1.0 mph |
| (9) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, multi shank rippers, speed 1.0 mph |
| (10) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, avg vol 0.5CY/LF-berm assumed |
| (9) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, multi shank rippers, speed 1.0 mph |
| (7) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, 1 ft depth |
| (11) | Contractor's actual costs, 1991 at E/053/012, Cat 225 Excavator, 20 ft wide road |
| (10) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 50 ft push, avg vol 0.5CY/LF-berm assumed |
| (12) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, U, mtl 2550 lb/CY, 100 ft push |
| (13) | Means 1998 & Rental Rate Blue Book 4/98: Cat D8N, mtl 2550 lb/CY, 150 ft. push, grade +/- 4%, |
| (14) | Means 1998 022-266-2030: hauling excavated or borrow material, Cat 980 loader, 6.5 CY, 1 mile round trip |
| (00) | DOGM general estimate - mulching |
| (00) | DOGM general estimate - fertilizing |
| (00) | DOGM general estimate - manure \$16/ton delivered, \$14/acre spreading |
| (00) | DOGM general estimate - broadcast seeding |
| (00) | DOGM general estimate - drill seeding |
| (00) | DOGM general estimate - hydroseeding |
| (00) | DOGM general estimate - site cleanup & trash removal |
| (00) | DOGM general estimate - equipment mobilization |
| (15) | Means 1998, 010-036-0180, project manager, minimum \$1,815/wk |